

MTX[®]

AUDIO



TR275

2-channel Class-AB Amplifier
660W Peak - 2x75W RMS

TR450

4-channel Class-AB Amplifier
900W Peak - 4x50W RMS

Designed by MTX in Phoenix, AZ - USA



mtxaudio.eu



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Thank You !

Thank you for purchasing an MTX Audio TR amplifier. Proper installation matched with MTX speakers and subwoofers provide superior sound and performance for endless hours of waking the neighbors. Congrats and enjoy the ultimate audio experience with MTX !

Specifications :

TR275

Specifications :

- 2-channel Class-AB wide range amplifier
- CEA2006 certified Power Output :
 - 2x110W RMS @2Ω and THD+N ≤1%
 - 2x75W RMS @4Ω and THD+N ≤1%
 - 1x220W RMS bridged @4Ω and THD+N ≤1%
- Crossover :
 - High pass 12dB/oct 80Hz
 - Low pass 12dB/oct 80Hz
- Signal-to-Noise Ratio (1 Watt) : > 74dB
- THD+Noise (Distortion) (1 Watt) : ≤ 0,18%
- Frequency Response (±1dB) : 10Hz-60000Hz
- Maximum Input Signal : 6V
- Maximum Sensitivity : 200mV
- Dimensions : 142x134x51mm
- High level inputs
- Optional EBC remote control (EBC-1)

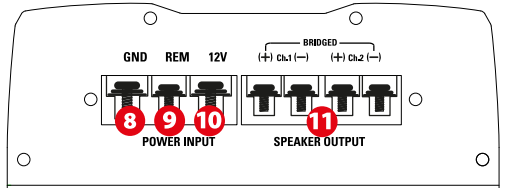
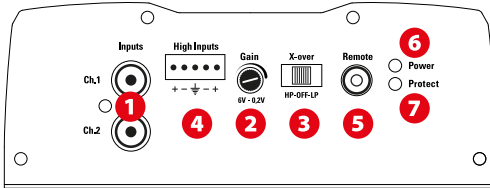
TR450

Specifications :

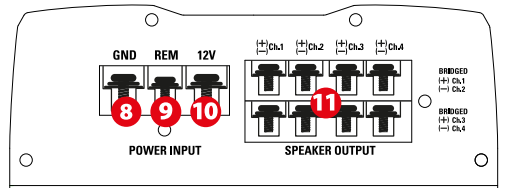
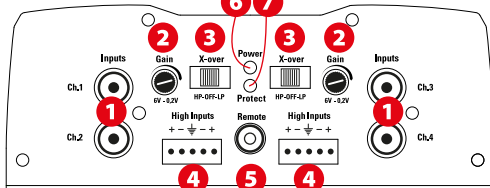
- 4-Channel Class-AB wide range amplifier
- CEA2006 certified Power Output :
 - 4x75W RMS @2Ω and THD+N ≤1%
 - 4x50W RMS @4Ω and THD+N ≤1%
 - 2x150W RMS bridged @4Ω and THD+N ≤1%
- Crossover :
 - High pass 12dB/oct 80Hz
 - Low pass 12dB/oct 80Hz
- Signal-to-Noise Ratio (1 Watt) : > 73dB
- THD+Noise (Distortion) (1 Watt) : ≤ 0,2%
- Frequency Response (±1dB) : 10Hz-60000Hz
- Maximum Input Signal : 6V
- Maximum Sensitivity : 200mV
- Dimensions : 182x134x51mm
- High level inputs
- Optional EBC remote control (EBC-1)

Settings, Power and Speaker connections :

TR275



TR450



- 1 **RCA Inputs (Input) :** These RCA inputs are used with source units that have RCA or Line level outputs. (Source units need a minimum level of 200mV output for proper operation of the amplifier). MTX recommends only high quality twisted pair cables (such as MTX ZNX) to decrease the possibility of radiated noise entering the system.
- 2 **Gain Control (Gain) :** The gain control matches the input sensitivity of the amplifier to the source unit being used. The operating range varies from 200mv to 6V.

- 2 Adjusting the gain
 1. Turn the gain control on the amplifier all the way down (counter clockwise).
 2. Turn up the volume control on the source unit to approximately 3/4 of maximum.
 3. Adjust the gain control on the amplifier until audible distortion occurs.
 4. Adjust the gain control down until audible distortion disappears.
 5. The amplifier is now calibrated to the output of the source unit.

- 3 X-Over Switch (X-Over) :

In "LP" position, the active low pass (LP) x-over is turned on to 80Hz 12dB/Oct. Use this position for subwoofer application.

In "HP" position, the active high pass (HP) x-over is turned on to 80Hz 12dB/Oct. Use this position for speaker application.

In "Off" position, the x-over is turned off. The amp is in wide range mode.

- 4 Speaker level inputs (High Inputs) : This input will allow the amplifier to operate from source units with speaker-level outputs. Output speaker leads from the source unit should be tied directly to the wire harness provided with the amplifier.
- Note : When speaker level inputs are used, a remote turn on wire must used to switch the amplifier on and off.

- 5 External Bass Control Port (Remote) - The Subwoofer Level Control Remote (EBC) plugs directly into this port, while the EBC itself can be placed anywhere in the vehicle for on demand bass adjustments. Attention, the EBC is optional. You can purchase it separately (Reference : EBC-1).

- 6 PowerOn LED (Power) : The LED illuminates green when the amp is switched on.

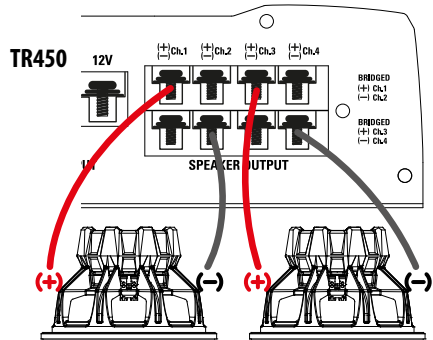
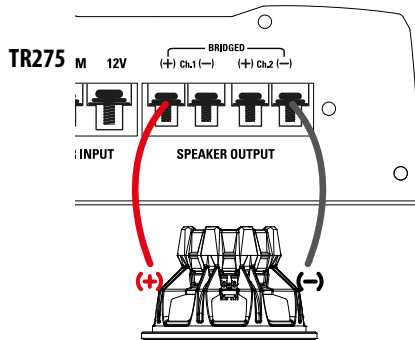
- 7 Protection LED (Protec.) : The LED illuminates red when the amp is in short circuit or thermal protection.

- 8 Ground Terminal (GND) : A proper ground is required for your amplifier to operate at peak performance. A short ground cable the same diameter as the power cable should be used to attach the ground terminal directly to the chassis of the vehicle. Always remove paint, dirt or debris to expose bare metal where the ground will be attached.

- 9 Remote Terminal (REM) : The amplifier can be turned on by applying 12 volts to this terminal. Typically this voltage is supplied by a wire from the source unit marked "remote" or "power antenna".

- 10 (+12V) Power Terminal (12V) : This is the main power input for the amplifier and must be connected directly to the positive terminal of the vehicles battery for proper operation. Use caution when installing (+12) power cable in the vehicle. Avoid running this cable parallel with RCA cables, antennas, or other sensitive equipment due to massive currents that can induce noise into the audio system. It is also very important to have a tight, secure connection for maximum performance. MTX recommends using 8~10mm² power wire with the MTX TR275 and TR450.

- 11 Speaker Terminals (Speaker Output) : Connect speakers to these terminals. Ensure correct polarity, positive-to-positive (+/+) and negative-to-negative (-/-). Reversing the polarity strongly degrades the bass level and the sound quality.



● Installation & Mounting :

MTX recommends your new amplifier be installed by an Authorized MTX retailer. Any deviation from specified installation instructions can cause serious damage to the amplifier, speakers and/or vehicle's electrical system. Damage caused from improper installation is NOT covered under warranty. Please verify all connections prior to system turn on !

1. Disconnect the vehicle's negative battery cable.
2. Determine the mounting place for your MTX amplifier. Keep in mind there should be sufficient air flow for proper cooling. Mark the mounting holes from the amplifier to be drilled. Before drilling make sure all vehicle wires, gas lines, brake lines and gas tank are clear and will not interfere with installation. Drill the desired holes and mount the MTX amplifier.
3. Install a positive (+) power cable from the vehicle's battery through the firewall using a grommet or firewall bushing to avoid cable damage from sharp edges of the firewall. Run the cable through the interior of the vehicle and connect it to the amplifier's (12V) terminal. Do Not connect to the battery at this time.

Note : Use only proper gauge wire for both positive and negative connections.

4. Install a circuit breaker or fuse within 20cm of the battery. This effectively lowers the risk of severe damage to you or your vehicle in case of a short circuit or accident. Make sure the circuit breaker is switched off or the fuse is taken out of the fuse holder until all connections are made. Now connect your positive power cable to the positive battery terminal of the battery.
5. Grounding - Locate a proper ground point on the vehicle's chassis and remove all paint, dirt or debris to reveal a bare metal surface. Attach the ground wire to that contact point. Connect the opposite end of the ground wire to the (GND) terminal on the MTX amplifier.
6. Connect a Remote Turn-on wire from the head unit to the MTX amplifier's Remote terminal. If the head unit does not have a dedicated Remote Turn-on lead, you may connect to the head unit's Power Antenna lead.
7. Connect RCA cables from the head unit to the MTX amplifier's RCA inputs. Run all signal cables away from vehicle wiring, computers and power cables. If cables must be crossed do so at a 90° angle. Use only high quality RCA cables to decrease radiated noise from entering the system.
8. Connect your speakers to the MTX amplifier's speaker terminals using proper gauge wire.
9. Double check all previous installation steps, in particular, wiring and component connections. Once verified, reconnect the vehicle's negative battery cable, turn the circuit breaker on or place the fuse in the fuse holder.

Note : Gain Levels on the amplifier should be turned all the way down (counter clockwise) before proceeding with adjustments.

● Troubleshooting :

Problem

Power LED is off

3 LEDs are flashing red

3 LEDs are solid red,
but no output

Output distorted

Balance reversed

Bass is weak

Blowing fuses

Cause

No +12V at remote connection

No +12V at Power connection

Insufficient ground connection

Blown power fuse

Blown amp

Speaker load is too low

The amp is in thermal protection

Input tension is too high or too low

Volume on head unit off

Speaker connections not made

Gain control on amplifier set to minimum

Signal processing units off

All speakers blown

Head unit volume set too high

Amplifier gain set too high

Speakers wired reversed

RCA inputs reversed

Speakers wired out of phase

Not using MTX woofers

Excessive output levels

Amplifier defective

Solution

Supply +12V to terminal

Supply +12V to terminal

Verify ground connection

Replace fuse and try to understand why

Return for service

Remove the speaker(s)

Wait for the amp to cool down

Check your battery and your alternator

Increase volume on head unit

Make speaker connections

Turn up gain

Apply power to signal processor

Replace speakers

Lower head unit volume

Lower amplifier gain

Wire speakers with correct orientation

Reverse RCA input

Wire speakers with correct phase

Buy MTX woofers

Lower the volume

Return for service

● Stay Tuned - Technical support :



mtxaudio.eu



twitter.com/MTXEurope



support@mitekeurope.com

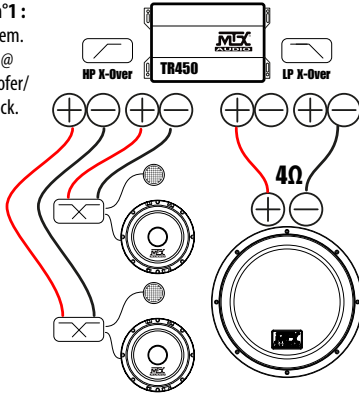


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● Installation examples :

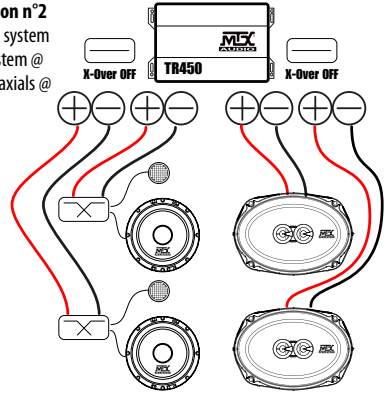
Installation n°1 :

3-Channel system.
Compo system @
front + subwoofer/
enclosure @ back.



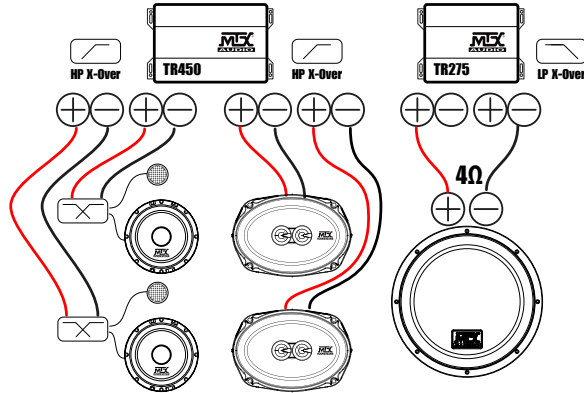
Installation n°2

4-Channel system
Compo system @
front + coaxials @
back.



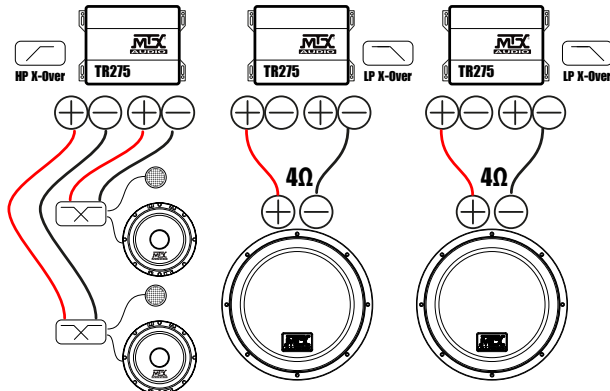
Installation n°3 :

5-Channel system.
Compo system @ front
+ coaxials @ back
+ subwoofer/enclosure
system @ back



Installation n°4 :

3-Channel system
with multiple amps.
Compo system @ front
+ dual subwoofer/enclosure
system @ back



Recommended subwoofers/enclosures : TR12-04, TR12AV, RTE12AS, RTF10AS, RT12AT, RT10AS, RT12AV

Recommended speakers : any TR/TRS speakers, any TX2 speakers, any TX4 speakers, any RTC/RTS speakers